## Fiscal Note for Proposed Amendments to Rule 15A NCAC 02C .0304

# Permitting and Inspection of Private Drinking Water Wells

**Rule Amendments:** 15A NCAC 02C .0300

Name of Commission: Environmental Management Commission

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Impact Summary: State Impact: Yes

Local Impact: Yes
Private Citizen Impact: Yes
Substantial Economic Impact: No

**Authority**: G.S. 87-97(e1)

**Necessity**: Current private drinking water well permitting, and inspection statutes require the

identification of potential sources of contamination when permitting a new private drinking water well. By amending the current rule, all well owners who are issued a well construction permit by the Local Health Department (LHD) within 1,000' of a Known Source of Release of Contamination (KSRC) receive additional information concerning

the risks associated with permitting a well in the proposed area.

## I. Summary

The permitting and inspection of private drinking water well rules (15A NCAC 02C. 0300) have not been updated since originally being adopted in 2008. The proposed rules incorporate current rule interpretations, newly adopted statutory requirements, and reflect significant improvement in consistency and clarity.

Most of the changes in the proposed rules are clarifications of current language as part of an effort to simplify and streamline the current rules. Interpretations that have been in place for many years have been clarified and the rules now include new language that requires the LHD to perform a search of the Department of Environmental Quality's (DEQ) published inventories to determine if a proposed well site is located within 1,000' of a KSRC. The LHD shall reference documentation from DEQ's published inventories of KSRC and notify the applicant of any known risks associated with constructing a well in the proposed location.

## II. Introduction and Background

The On-Site Water Protection Branch (OSWP) of the Environmental Health Section, DPH, DHHS, oversees the permitting, inspection, and sampling rules for private drinking water wells (PDWW). The program is a joint effort among the LHDs and the OSWP. The OSWP provides statewide regulatory and consultative services related to PDWW permitting to LHDs and numerous other clients, including builders, developers, land owners, well contractors, geologists, environmental health consultants, and others.

PDWW systems serve homeowners in rural parts of the state and areas that are not served by community wells or municipal water supplies. Approximately 52% of the homes in North Carolina depend upon groundwater for their drinking water supply. That dependence within our state upon PDWW systems has remained relatively constant for over 20 years.

Since July 1, 2008, all NC LHDs are mandated to implement a PDWW permitting, inspection, and sampling program. In regard to private well permitting, the LHD shall conduct site evaluations to determine if there are any potential sources of contamination on or around the site on which a PDWW is being permitted. The LHD must take these potential sources of contamination into account when siting the permanent location of the well to protect the groundwater resources and the public health of those using groundwater as their source of drinking water.

House Bill 74 was signed into law (Session Law 2013-413) on July 26, 2013 and was incorporated into NC General Statute 87-97(e1) – Notice for Wells at Contamination Sites. - The Commission shall adopt rules governing permits issued for private drinking water wells for circumstances in which the local health department has determined that the proposed site for a private drinking water well is located within 1,000 feet of a known source of release of contamination. Rules adopted pursuant to this subsection shall provide for notice and information of the known source of release of contamination and any known risk of issuing a permit for the construction and use of a private drinking water well on such a site.

## III. Purpose of Rule Change

The primary goal of permitting and inspecting private drinking water wells is the protection of public health and the groundwater resources of NC. Groundwater may contain bacteria, pathogens, and other man-made or naturally occurring contaminants that can have a significant impact on people and their surroundings. Current permitting and inspection of PDWW rules (15A NCAC 15A 02C. 0300) require the LDH to conduct a field investigation to evaluate the topography, landscape position, available space and potential sources of groundwater contamination on or around the site on which a private drinking water well is to be located. However, no rule currently exists for the LHD or related agency to provide any further information to the well owners whose well is being permitted within close proximity to an area that has a known source of release of contamination (KSRC).

This regulatory void leaves well owners without additional guidance concerning potential risks and recommended sampling associated with permitting a PDWW in an area with a known source of release of contamination. While many LHDs currently assist such well owners, there is no requirement for them to do so. As a result, well owners across the state receive inconsistent information that may or may not address the applicable concerns. Some may receive nothing at all.

The requirement set forth in Session Law 2013-413 increases the LHD's responsibility to provide additional site-specific information to PDWW applicants concerning nearby activities that could affect the water quality of their well. Currently, those counties or health districts with a larger tax base and budgets have the means to develop permitting tools that include known contaminated sites and staff their programs with individuals that can disseminate that information and provide helpful follow-up to well owners. Smaller or less affluent counties provide the best service they can, but often fall short when it comes to offering extra, non-mandated services and information such as the educational materials discussed here. Undesirable water quality knows no boundaries and doesn't stop at the county line. There is thus a need for all 100 North Carolina counties to have access to a permitting tool that identifies the location of KSRC. This will allow all counties to consistently provide accurate information regarding potential contaminants and sampling recommendations to all well owners. The creation of North Carolina's Well Permitting Decision Tool allows all counties to consult a sole source for information on all contamination releases that have been reported to DEQ.

Leaving the rule as is will result in well owners, their families, and public citizens at potential risk of drinking or serving water that may be of an objectionable quality, especially in those counties with little resources. This amended rule (15A NCAC 15A 02C .0304) and the creation of North Carolina's Well Permitting Decision Tool will address the specific concerns associated with potential contaminants to improve consistency and maximize well owner awareness.

Careers, second homes, and family situations can prompt NC residents to relocate throughout the state. It is understandable and somewhat expected that the extent and nature of some services provided will differ from county to county; however, permitting resources and guidance that could prevent the consumption of groundwater contaminants should not be one of those variable services. Whether in the far reaching western region of NC or on the shore of the Outer Banks in the eastern part of the state, the health of the people in our state (physical, mental, and financial) is indeed priceless. For this reason, only the most current, relevant, and accurate information should be disseminated to well owners when the well is initially being permitted. Presently, counties that offer additional recommendations regarding

KSRC do so based on local, internal decisions and direction. The frequency at which this information is reviewed and/or updated is unknown. An argument can be made that with all the other matters competing for attention at the local government level (staff shortage and turnover, budget cuts, new regulatory requirements, etc.) reviewing and updating contaminated site data does not rank high on the priority list. This could result in well owners receiving outdated or irrelevant information regarding the permitting of their private well.

In amending rule 15A NCAC 15A 02C .0304 language will be added to address approved sources of KSRC data (i.e. DEQ's Well Permitting Decision Tool) as well as necessary components (i.e. recommended testing, limitations of testing, need for and frequency of resampling, additional well construction recommendations) of the materials distributed. This will aid in preventing the knowledge gap that currently exists for well owners from county to county across the state, while ensuring only the most reliable and pertinent information is passed along to concerned well owners.

## IV. Economic Impact Analysis

Overall, the largest financial impact of the proposed 15A NCAC 02C .0300 rules will be on the local health departments. LHD staff will spend additional time searching DEQ's Well Permitting Decision Tool to determine whether a proposed site will be located within 1,000 feet of a KSRC. If confirmed, additional time will be required to pass along standard recommendations to the property owner concerning the risks associated with installing a well on their property.

Some of the most important changes in the proposed rules have an unquantified fiscal cost. These include being able to develop lots that may not have been able to be developed before due to counties refusal to permit wells near areas with known sources of release of contamination.

The main overall benefit from the proposed rules is the changes to further protect public health and the environment. The requirement for additional recommendations for private well sampling is an unquantifiable cost to the owner. But the benefits to everyone, owner included, are also unquantifiable. Several positive changes that are unquantifiable have also been made for the benefit of owners: clearer identification of known sources of release of contamination, additional water sample recommendations, and more.

Overall, the proposed rules improve the ability of the LHDs and OSWP to protect public health and the groundwater yet still provide the private sector with permitting options that are clearer and better defined.

## V. ANALYSIS

To determine the fiscal impact of the proposed rules, information was collected from LHDs, OSWP staff, and well contractors. LHDs were categorized into three groups based upon the number of authorized agents on staff (small LHDs: one or two; mid-size LHDs: three to four; large LHDs: five or more) that permit on-site wastewater treatment systems. The size of the LHD impacts the services offered, on-site wastewater treatment system permits issued, and the fees charged. The smaller LHDs are generally in rural counties, and the larger LHDs are in more urban counties. Information was collected across the range of LHD sizes and physiographic regions (mountains, piedmont, and coastal plain) to provide a more complete picture of the proposed rule fiscal impact. The permit projections are included in Appendix A.

The analysis of the proposed rules is broken down into two categories:

- I. Rules with minor changes or technical corrections; and
- II. Rules with a quantifiable fiscal impact

### *I.* Rules with minor changes or technical corrections

Several rules have been updated with minor changes or technical corrections to ensure consistency across all the rules. These rules do not represent a significant change in intent or pose any additional/fiscal impact on industry, State, and local governments. These rules include:

Section .0301 – Scope and Purpose

Section .0302 – Definitions

Section .0304 – Permitting

Section .0309 - Well Abandonment and Certification

## Rule 15A NCAC 02C .0304(a) – Permitting

The permitting and inspection of private drinking water well rules require an application to be submitted for the construction, repair, or abandonment of a private drinking water well. However, the rules currently only require that a permit be issued for the construction or repair of a well with no reference to abandonment

The proposed rule change would specify that a permit shall be issued for the abandonment of a private drinking water well and ensure all activities that currently require an application would be accompanied by the issuance of a permit. It has been assumed that a permit must be issued because of the current requirement for the submittal of a well abandonment application. This rule change constitutes a clarification of the current rules and reflects how this specific requirement is applied currently. There is no cost to OSWP or LHDs. This would impact homeowners and certified well contractors positively as it would provide them with documentation that a well abandonment was completed in accordance with state and local regulations.

Rule 15A NCAC 02C .0309(a) – Well Abandonment and Certification

The inspection process for well abandonments has also been clarified. This rule illustrates the minimum requirements and the process an owner and the LHD must follow. LHDs that already inspect well abandonments may choose to modify current processes based on the proposed rule. LHDs that currently do not perform well abandonment inspections are not required to do so under the proposed rule.

### II. Rules with a quantifiable fiscal impact

*Rule 15A NCAC 02C .0304(b) – Permitting* 

North Carolina § 87-97(e1) requires the LHD to reference documentation from DEQ's published inventories of KSRC within 1,000' of a proposed well site. This rule helps to clarify the minimum requirements of what is needed and the process an owner and the LHD must follow. Furthermore, it allows for sites that would not have been permitted in the past to potentially receive permits based on the ability to provide additional recommendations to the applicant.

The Department of Environmental Quality has dedicated nearly two years to create the Well Permitting Decision Tool that will be used by LHDs to identify any KSRC and there is no additional cost for providing this information moving forward. The data provided by this tool is currently stored within each section, however, the new tool will identify all sites with KSRC data. Because it will be stored at and accessible from one central location, LHD staff will spend less total time on private drinking water well permitting.

Initial testing of the well permitting decision tool indicates sites potentially affected by KSRC can be identified and additional permit recommendations made in approximately 1 additional employee hour at a cost of approximately \$35.99 per permit. Table 1 presents the estimated cost to LHDs (statewide) from the additional workload for the first five years of implementation, assuming that the annual number of private drinking water well permit applications submitted each year ranges from 9,950 to 10,700 over that period. See Appendix A for a description of how the number of private drinking water well permit applications was projected.

<sup>&</sup>lt;sup>1</sup> The average hourly compensation of LHD staff responsible for well permitting was estimated based on 2016 government salary information for REHS from NCOSHR and projected growth in NC state and local government wages from IHS Markit, and cost of employee benefits by industry from the US Bureau of Labor Statistics. The mid-range hourly wage rate, including benefits is expected to be \$35.99 in 2018. This analysis assumes that LHD staff wages will not change significantly over the next five years.

Table 1. Projected Cost to LHDs for Identification and Notification of KSRC

2019	2020	2021	2022	2023
\$358,200	\$372,100	\$380,600	\$382,200	\$384,900

The projected costs in Table 1 are conservatively high estimates. Several LHDs already identify KSRCs and notify property owners. The municipalities that are already in compliance with the proposed rules will not bear any additional costs. In fact, access to the new Well Permitting Decision Tool may decrease the amount of time those LHD staff spend gathering the required data for permitting and notification.

The impact of adding the identification of KSRC to the proposed rules and providing applicants with information concerning potential risks is a positive change for property owners, on net. However, this new information of potential contamination risks could prompt some property owners to incur additional costs to mitigate that risk. Upon receiving additional information concerning potential groundwater contamination within 1,000' of a permitted property, some portion of applicants will request additional sampling and subsequent treatment of their water supply.

The number of property owners that will request to have additional water samples or install water treatment devices is almost impossible to predict. It is very dependent on the contaminants present and the treatment options available. The most common contaminants identified in the well permitting decision tool include volatile organic compounds (VOCs) and the cost for the NC State Laboratory of Public Health to run this analysis is currently \$74.00. The cost per treatment system will vary depending upon the contaminant being treated. While some contaminants will be relatively straight forward to remove, others will require higher levels of treatment. Identification of previously unknown contamination sites will prompt treatment and cleanup efforts. Additional testing and treatment of contaminated well water will reduce the risk of negative human and environmental health impacts.

# **APPENDIX A: Projected New Drinking Water Well Permit Applications**

The analysis below indicates that the annual number of private drinking water well permit applications will increase between 2018 and 2023. Well permit applications are expected to grow slowly over the next five years (see Table 3 below).

### 1. Private Drinking Water Well Permit Projections

Table 1 shows the approximate number of new private well construction permits issued per year by the LHDs from 2008 to 2014.<sup>2</sup> The OSWP collects information from LHDs regarding the number of wastewater treatment systems and private drinking water wells permitted in County On-Site Activity Reports. As Table 2 illustrates, the number of new private drinking water well permits issued each year is typically 50% of the total number of new construction authorization permits issued.

Not all LHDs respond and provide information to the OSWP in the On-Site Activity Reports. The approximate number of wastewater treatment system permits issued each year was calculated in the following manner: Each year was evaluated for the LHDs that did not respond. To provide an estimate of the number of permits issued for the missing values, the median was calculated based on the information for that LHD in the rest of County On-Site Activity Reports. The yearly total was calculated including the median number of permits for the missing LHD records. The OSWP has information up through 2014. Information for 2015, 2016, and 2017 on the number of permits issued has not yet been compiled.

Table 2. Approximate Number of Private Drinking Water Well Permits Issued

	Approximate Number of		
	New Wastewater	Number of New Private	Change in Number of
Year	Construction	Drinking Water Well	Private Well Permits
	Authorization Permits	Permits Issued	Issued
	Issued		

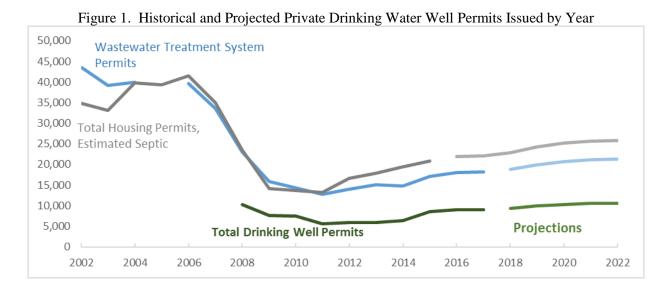
<sup>&</sup>lt;sup>2</sup> NC On-Site Water Protection Branch (2008-2014). "County Monthly Activity Reports." Accessed at http://ehs.ncpublichealth.com/oswp/resources.htm. Statewide permitting of private drinking water wells was not required prior to July 1, 2008, so historical data before this date is not available.

Historical Data			
2008*	22,958	10,210	
2009	15,479	7,703	-24%
2010	14,293	7,421	-4%
2011	11,374	5,558	-25%
2012	11,509	5,846	5%
2013	13,374	5,891	1%
2014	12,212	6,336	8%
Estimates			
2015	17,139	8,570	16%
2016	17,989	8,995	5%
2017	18,193	9,097	1%

<sup>\*2008</sup> well permit totals were doubled in Table 2 because data prior to July 1, 2008 was not available.

The number of permits issued began to recover in 2012 through 2014, likely reflecting the end of the recession. The number of permits issued depends on the status of the housing market and the economy, so it can vary from year to year.

The projected number of permit issued from 2017 to 2023 was based on statewide building permit projections,<sup>3</sup> weighted by county population growth projections.<sup>4</sup> The total number of projected building permits for single family homes was multiplied by the percent of households in each county using on-site wastewater treatment systems<sup>5</sup> to estimate the number of wastewater treatment system permits for 2017 through 2023. Since data collected from LHD's indicate that approximately half of the homes with on-site wastewater treatment systems also utilize private drinking water wells, the projected number of wastewater treatment systems was divided by half to reach an estimate of future well permits. Figure 1 shows the relationship between the number of new drinking water well permits issued, the number of wastewater treatment system permits issued, and the total number of housing permits with on-site wastewater treatment systems.



<sup>&</sup>lt;sup>3</sup> IHS Connect (September 2016). State Analysis: Forecast Data: Annual Data – North Carolina. Accessed at https://www.ihs.com/index.html.

<sup>&</sup>lt;sup>4</sup> NC Office of State Budget and Management (2016). *Annual County Population Totals* 2017-2021. Accessed at http://www.osbm.nc.gov/demog/county-projections.

<sup>&</sup>lt;sup>5</sup> U.S. Census Bureau (1990). 1990 Census of Population and Housing – Sewage Disposal. Accessed at https://www.census.gov/mp/www/cat/decennial\_census\_1990/1990\_census\_of\_population\_and\_housing\_summary\_tape\_file\_3a.html

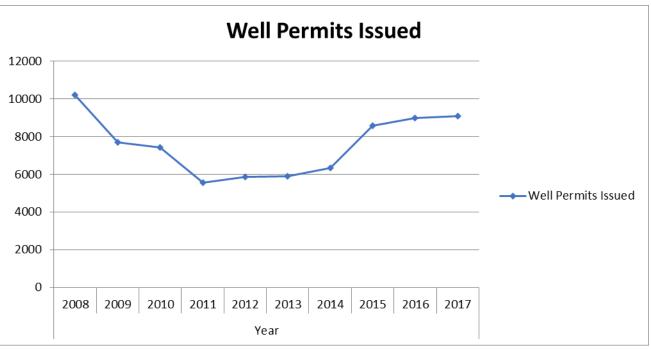


Table 3 shows the projected number of new drinking water well permits issued from 2018 to 2023.

Table 3. Projected Number of Permits Issued

Year	Total Number of Permits Issued
2018	9,400
2019	9,952
2020	10,340
2021	10,576
2022	10,619
2023	10,694

## **APPENDIX B: Proposed Rules**

#### SECTION .0300 - PERMITTING AND INSPECTION OF PRIVATE DRINKING WATER WELLS

### 15A NCAC 02C .0301 SCOPE AND PURPOSE

- (a) The purpose of the rules of this Section is to set out standards for permitting and inspection of private drinking water wells as defined in G.S 87-85 by local health departments pursuant to G.S. 87-97.
- (b) The rules of 15A NCAC 02C .0100 are applicable to private drinking water wells. In addition to the provisions in 15A NCAC 02C .0100, the following shall apply:
  - (1) The well owner shall not place potential Potential sources of groundwater contamination shall not be located closer to the well than the separation distances specified in 15A NCAC 02C .0107(a)(2) or .0107(a)(3), as applicable;
  - (2) In addition to the provisions in 15A NCAC 02C .0109 PUMPS AND PUMPING EQUIPMENT, the builder, well contractor, pump installer, or homeowner, as applicable, shall provide assistance when necessary to gain access for inspection of the well, pumps, and pumping equipment; and
  - (3) In addition to the requirements of 15A NCAC 02C .0113 ABANDONMENT OF WELLS, any well which acts as a source or channel of contamination shall be repaired or permanently abandoned within 30 days of receipt of notice from the local health department. The person abandoning the well shall provide a minimum 24 hour notice to the local health department prior to commencement of permanent abandonment procedures.

History Note:

Authority G.S. 87-87; 87-97;

Eff. July 1, 2008.

Amended Eff. ????

### 15A NCAC 02C .0302 DEFINITIONS

The definitions in G.S. 87-85 and 15A NCAC 02C .0102 apply throughout this Section. In addition, the following definitions apply throughout this Section:

- (1) "Abandonment Permit" means a well abandonment permit issued by the local health department authorizing or allowing the permanent abandonment of any private drinking water well as defined in the rules of this Section.
- (1) (2) "Addition" means any structure that is constructed, altered or placed on property that contains one or more wells.

  This would not include replacement of existing equipment within the existing footprint of a structure and addresses only those situations for which a building permit is required.
- (2) "Board of Health" means the County Board of Health or successor entity.
- (3) "Certificate of Completion" means a certification by the Department local health department that a private drinking water well has been constructed or repaired in compliance with the construction permit or repair permit.
- (4) "Construction of wells" means all acts necessary to construct wells for any intended purpose or use, including the location and excavation of the well, placement of casings, screens and fittings, development and testing.
- (5) "Construction permit" means a well construction permit issued by the Department local health department authorizing or allowing the construction of any private drinking water well as defined in the rules of this Section.
- (6) "Department of Environment and Natural Resources" or "Department" means the North Carolina Department of Environment and Natural Resources. The term also means the authorized representative of the Department. For the

- purposes of any notices required pursuant to the rules of this Section, notice shall be mailed to "Division of Environmental Health, On Site Water Protection Section, North Carolina Department of Environment and Natural Resources," 1642 Mail Service Center, Raleigh, NC 27699 1642.
- (7) "Known source of release of contamination" means a location where any of the following activities, facilities, or conditions have been documented by the Department of Environmental Quality or a local health department:
  - (a) Groundwater contamination incidents arising from agricultural operations, including application of agricultural chemicals pursuant to 15A NCAC 02L;
  - (b) Groundwater contamination associated with the construction or operation of injection, monitoring, and other wells subject to permitting under the Well Construction Act (G.S. 87-88) and 15A NCAC 02C;
  - (c) Groundwater contamination associated with the operation of non- discharge, discharge (NPDES) facilities, land application of animal waste, and other activities subject to permitting under G.S. 143-215.1;
  - (d) Releases of hazardous waste or constituents that currently exceed the Groundwater Quality Standards listed in 15A NCAC 02Lat facilities governed under G.S. 130A-294;
  - (e) Dry-Cleaning Solvent Cleanup sites regulated under G.S. 143-215.104;
  - (f) Pre-regulatory landfills and Inactive hazardous substance or waste disposal sites governed under the Inactive Hazardous Sites Act of 1987 (North Carolina General Statute 130A-310 et seq);
  - (g) Solid waste facilities subject to 15A NCAC 13B that have monitoring wells with exceedances of the Groundwater Protection Standards as defined in 15A NCAC 13A .1634(g) and (h);
  - (h) Releases of petroleum and hazardous substances subject to G.S. 143-215.75 through 215.98;
  - (i) Sites that fall within the authority of the Brownfields Program as defined by NC General Statute 130A, Article 9
    Part 5; or
  - (j) Contamination associated with pollution sources in soils or other sites known or suspected to have exceeded the Groundwater Quality Standards listed in 15A NCAC 02L.
  - (k) Contamination known to the local health department through experience with the property, surrounding properties or information provided by the applicant.
- (8) "Local Health Department" means the <u>authorized agent of the</u> county or district health department or its successor.
- (9) "Person" means all persons, including individuals, firms, partnerships, associations, public or private institutions, municipalities or political subdivisions, governmental agencies, or private or public corporations organized or existing under the laws of this State or any other state or country.
- (9) "Plat" means a property survey prepared by a registered land surveyor, drawn to a scale of one inch equals no more than 60 feet, that includes: the specific location of all structures and proposed structures and appurtenances, including but not limited to decks, porches, pools, driveways, out buildings, existing and proposed wastewater systems, existing and proposed wells, springs, water lines, surface waters or designated wetlands, easements, including utility easements, and existing or proposed chemical or petroleum storage tanks above or below ground. "Plat" also means, for subdivision lots approved by the local planning authority and recorded with the county register of deeds, a copy of the recorded subdivisions plat that is accompanied by a site plan that is drawn to scale.
- (10) "Pumps" and "pumping equipment" means any equipment or materials utilized or intended for use in withdrawing or obtaining ground-water including well seals.
- (11) "Repair" means work involved in deepening, reaming, sealing, installing or changing casing depths, perforating, screening, or cleaning, acidizing or redevelopment of a well excavation, or any other work which results in breaking or opening the well seal.

- (12) "Repair permit" means a well repair permit issued by the <del>Department</del> <u>local health department</u> authorizing or allowing the repair of any private drinking water well as defined in the rules of this Section.
- "Site plan" means a drawing not necessarily drawn to scale that shows the existing and proposed property lines with dimensions, and the specific location of all structures and proposed structures and appurtenances, including decks, porches, pools, driveways, out buildings, existing and proposed wastewater systems, existing and proposed wells, springs, water lines, surface waters or designated wetlands, easements, including utility easements, and existing or proposed chemical or petroleum storage tanks above or below ground.
- (14) "Water supply system" means pump and pipe used in connection with or pertaining to the operation of a private drinking water well including pumps, distribution service piping, pressure tanks and fittings.
- "Well contractor activity" <u>has the same meaning as in G.S. 87-98.2(6)</u>. <u>means the construction, installation, repair, alteration or abandonment of any well.</u>
- "Well Contractor" means any person in trade or business who undertakes to perform a well contractor activity or who undertakes to personally supervise or personally manage the performance of a well contractor activity on the person's own behalf or for any person, firm, or corporation in accordance with the well contractor certification requirements of 15A NCAC 27.
- "Well seal" means an approved arrangement or device used to cap a well or to establish and maintain a junction between the casing or curbing of a well and the piping or equipment installed therein, the purpose or function of which is to prevent pollutants from entering the well at the upper terminal.

*History Note: Authority G.S.* 87-87; 87-97;

Eff. July 1, 2008.

Amended Eff. ????

## 15A NCAC 02C .0303 APPLICATION FOR CONSTRUCTION PERMIT

An application for a permit to construct, repair, or abandon a private drinking water well shall be submitted to the local health department for the county where the well is to be located by a property owner or the property owner's agent. The application shall include:

- (1) Name, address and phone number of the proposed well property owner or owner's agent;
- (2) Signature of owner or agent;
- (3) Address and parcel identification number of the property where the proposed well is to be located;
- (4) A plat or site plan as defined in the rules of this Section;
- (5) Intended use(s) of the property;
- Other information deemed necessary by the Department local health department to determine the location of the property and any site characteristics such as existing or permitted sewage disposal systems, easements or rights of way, existing wells or springs, surface water or designated wetlands, chemical or petroleum storage tanks, landfills, waste storage, known source of contamination release and any other characteristics or activities on the property or adjacent properties that could impact groundwater quality or suitability of the site for well construction;
- (7) Any current or pending restrictions regarding groundwater use as specified in G.S. 87-88(a); and
- (8) Any variances regarding well construction or location issued under 15A NCAC 02C .0118.

History Note: Authority G.S. 87-87; 87-97;

Eff. July 1, 2008.

### 15A NCAC 02C .0304 PERMITTING

(a) No person shall construct a private drinking water well without first obtaining a well construction permit from the Department local health department. No person shall repair a private drinking water well without first obtaining a well repair permit except a well repair permit is not required for maintenance or pump repair or replacement. Disinfection in accordance with 15A NCAC 02C .0113 is a maintenance activity that does not require a repair permit. No person shall permanently abandon a private drinking water well

without first obtaining a well abandonment permit from the Department local health department.

(b) Before issuing a well construction permit, the Department local health department shall conduct a field investigation to evaluate the topography, landscape position, available space and potential sources of groundwater contamination on or around the site on which a private drinking water well is to be located. Furthermore, the Department shall conduct a search of DEQ's published inventories to determine whether the proposed well site is located within 1000 feet of a known source of release of contamination. The Department local health department shall issue a private water well construction permit after determining the site can be permitted for a well meeting the rules of this Section. Notwithstanding the above, the Department local health department shall not issue a construction permit for a well in violation of restrictions regarding groundwater use established pursuant to G.S. 87-88(a). The construction permit shall include a site plan showing the location of potential sources of contamination and area(s) suitable for well construction. The construction permit shall reference documentation from DEQ's published inventories of known releases of contamination within 1000 feet of the proposed well site, and any known risk of constructing the well related to those findings. The Department local health department shall issue a written notice of denial of a construction permit if it determines a private drinking water well cannot be

constructed in compliance with the rules of this Section. The notice of denial shall include reference to specific laws or rules that cannot be met and shall be provided to the applicant.

(c) A well eonstruction permit is valid for a period of five years except that the Department local health department may revoke a permit at any time if it determines that there has been a material change in any fact or circumstance upon which the permit is issued. The validity of a well construction permit or a well repair permit is not affected by a change in ownership of the site on which a private drinking water well is proposed to be located. located if the proposed well can still be constructed or repaired in the permitted

area and in accordance with this Section and 15A NCAC 02C .0100.

Well construction permits issued under local well ordinances prior to the effective date of these Rules remain valid for the term of those permits unless those permits are suspended or revoked. The Department local health department may suspend or revoke any permits issued upon a determination that the rules of this Section have been violated.

(d) If there is an improperly abandoned well(s) on the site, the construction permit shall be conditioned upon repair or abandonment of any improperly abandoned well(s) in accordance with the rules of 15A NCAC 02C .0100.

History Note:

Authority G.S. 87-87; 87-97;

Eff. July 1, 2008.

Amended Eff. ????

## 15A NCAC 02C .0305 GROUT INSPECTION AND CERTIFICATION INSPECTIONS: CERTIFICATION

(a) The well contractor shall contact the local health department to schedule a grout inspection before grouting a private drinking water well. Contact shall include the location, permit number and anticipated time for grouting each private drinking water well and the appointment shall be scheduled by the end of the business day before the grouting is to occur except where the local health department has made provisions for scheduling inspections at night or on the same day of the inspection.

- (b) Upon completion of a grout inspection, the Department local health department shall provide a written certification on the well permit that a grout inspection was completed and that the grouting is in compliance with the rules of 15A NCAC 02C .0100. When a local health department is unable to conduct a grout inspection within one hour of the scheduled time, the well contractor may grout a well without a grout inspection by the Department local health department. The well contractor shall provide a written certification to the local health department that the well has been grouted in compliance with the rules of 15A NCAC 02C .0100. A completed Well Construction Record form GW-1 indicating the well was grouted in compliance with the rules of this Section shall serve as the well contractor's grout certification. For purposes of issuing a certificate of completion, the well contractor's grout certification shall be accepted by the Department local health department as evidence the grout complies with the rules of this Section if the local health department:
  - (1) was contacted by the well contractor to schedule a grout inspection;
  - (2) was unable to inspect the grouting of the well within one hour following the scheduled time; and
  - (3) upon final inspection, finds no evidence to indicate the well grout does not comply with the rules of this Section.

*History Note: Authority G.S.* 87-87; 87-97;

Eff. July 1, 2008.

Amended Eff. ????

### 15A NCAC 02C .0306 WELL COMPLETION AND CERTIFICATION

- (a) After receiving a permit to construct a private drinking water well, the property owner or his agent shall notify the health department prior to well construction if any of the following occur:
  - (1) The separation criteria specified in 15A NCAC 02C .0107 cannot be met;
  - (2) The residence or other structure is located other than indicated on the permit;
  - (3) The use of the structure is changed from the use specified on the permit;
  - (4) The septic system needs to be changed from the location indicated on the permit;
  - (5) Landscaping changes have been made that may affect the integrity of the well;
  - (6) There are current or pending restrictions regarding groundwater use as specified in G.S. 87-88(a);
  - (7) The water source for any well intended for domestic use is adjacent to any water-bearing zone suspected or known to be contaminated; or
  - (8) Any other changes occur in the information provided in the application for the well permit.
- (b) The well contractor shall maintain a copy of the well construction permit or permit, repair permit, or abandonment permit on the job site at all times during the construction, repair or abandonment of the well. The well contractor shall meet all the conditions of the permit.
- (c) Upon completion of construction of a private drinking water well, the Department shall complete an "as built" drawing of the well location. The well contractor shall submit a copy of Residential-Well Construction Record (GW-1) to the local health department. Upon completion of construction or repair of a private drinking water well for which a permit is required, the Department local health department shall inspect the well and issue a Certificate of Completion that includes an "as built" drawing. Prior to the issuance of a Certificate of Completion, the Department local health department shall: verify that the well was constructed in the designated area and according to the well construction permit and the rules of this Subchapter. The Department local health department shall inspect the grout around the casing for any settling, inspect the well head after the well seal is in place and obtain—verify that a well construction record Well Construction Record has been received from the Certified Well Contractor. No person shall place a private drinking water well into service without first having obtained a Certificate of Completion.

*History Note: Authority G.S.* 87-87; 87-97;

4/6/2018

Amended Eff. ????

15A NCAC 02C.0307 WELL DATA AND RECORDS

(a) Any person completing, abandoning or repairing any well shall submit a record of the construction, abandonment or repair to the

local health department and the Division of Water Quality Resources within 30 days of completion of construction, abandonment or

repair. The record shall be on a form provided by the Department of Environmental Quality.

(b) The local health department shall maintain a registry of all permitted private drinking water wells, specifying the well location and

the water quality test results until the well is permanently abandoned in accordance with this Subchapter.

History Note:

Authority G.S. 87-87; 87-97;

Eff. July 1, 2008.

Amended Eff. ????

15A NCAC 02C .0308 APPEAL PROCEDURE

Appeals concerning permit decisions or actions by the Department local health department to enforce the rules of this Section shall be

conducted according to the procedures established in G.S. 150B, the Administrative Procedures Act.

History Note:

Authority G.S. 87-87;

Eff. July 1, 2008.

Amended Eff. ????

15A NCAC 02C .0309 WELL ABANDONMENT AND CERTIFICATION

(a) The applicant or well contractor shall contact the local health department to provide notification of intent to permanently abandon a

private drinking water well. Contact shall include the location, permit number, and anticipated time for abandonment of each private

drinking water well and the appointment shall be scheduled by the end of the business day before the abandonment is to occur except

where the local health department has made provisions for scheduling inspections at night or on the same day as the inspection.

(b) Upon notification from the well contractor, the local health department may opt to inspect the well abandonment process. The

local health department shall inform the well contractor of their availability and intention to inspect the well abandonment

immediately after notification as described in .0305(c). When a local health department is unable to conduct the abandonment

inspection within one hour of the scheduled time, the well contractor may abandon the well without an inspection by the local health

department.

(c) Upon completion of a permanent well abandonment, the Department local health department shall provide a written certification

on the well abandonment permit, or other local health department form, that a well abandonment inspection was completed and that

the abandonment is in compliance with the rules of 15A NCAC 02C .0100. When the local health department opts to not inspect the

permanent abandonment process, the well contractor shall provide written certification to the local health department that the well has

been abandoned in compliance with the rules of 15A NCAC 02C .0100. A completed Well Abandonment Record form GW-30

indicating the well was abandoned in compliance with the rules of this Section shall serve as the well contractor's abandonment

certification.

History Note:

*Authority G.S.* 87-87;

4/6/2018